What is Squalene and Squalane?

Before the 1980’s, the only commercially available squalene was derived from a particular species of sea sharks. Squalene is found in a variety of vegetable oils, such as rice bran oil and olive oil. A more common source, with the same chemical composition is now is derived from Olive Oil. Squalene is an unsaturated hydrocarbon, which can easily produce oxygen by combining with water. Squalene has been extensively researched and, as an oxygen carrier, found to play a key role in maintaining health. The interest in Squalane has significantly increased since it was found to be present at about 10% in human sebum which makes it very desirable for use in skin care.

The only problem with Squalene is the instability of the molecule. With it’s high degree of unsaturation, it's prone to oxidation and subsequent reduced shelf-life. To overcome this problem, Squalene was completely hydrogenated to form Squalane. Squalane is derived from Squalene, but is much more stable against oxidation. Squalane is now the preferred form for use in skin care products.

Squalane is a natural emollient that imparts an elegant feel to formulations. It is excellent for use in skin care and will help skin to retain moisture and feel soft and conditioned without feeling greasy. Squalane can be used in hair care to nourish and provide shine and conditioning.